

Amendment and Response

Applicant: Curtis Miller et al.

Serial No.: 10/008,415

Filing Date: November 13, 2001

Docket: 1554-AB

Title: GAS ASSISTED SPRAY APPLICATOR

IN THE CLAIMS

Please amend claims 1 and 2, and please add claims 3-19.

1.(Amended) An adhesive applicator system comprising:

a first syringe for storing a first solution;

a second syringe for storing a second solution;

a compressed gas source for providing compressed gas; and

an applicator including a manifold and a mixing tip, the manifold a tip fluidly connected to both the first and second syringes for selectively receiving the first and second solutions in a separated manner and providing an expulsion port for each solution through which the solutions separately exit, the expulsion ports further being enclosed within the mixing tip which is further being connected to the compressed gas source and providing for release of compressed gas around, adjacent to or proximate the expulsion ports such that the compressed gas when released mixes and propels the solutions and the compressed gas to a surgical site.

2.(Amended) An applicator including a A mixing tip and a manifold attached thereto for attachment to a manifold for applying adhesive from attached syringes, the manifold including a plurality of syringes holders for receiving syringes and a plurality of corresponding lumens fluidly connected to the syringes and extending outward from the manifold in a manner such that the lumens expel fluids substantially adjacent to one another that mix thereafter, the mixing tip comprising a mixing body having a mixing chamber therein for selectively receiving the first and second solutions in a separated manner via the lumens and providing an expulsion port for each lumen through which the solutions separately exit, the tip further being connectable to a compressed gas source and providing for release of compressed gas around, adjacent to or proximate the expulsion ports such that the compressed gas when released mixes and propels the solutions and the compressed gas to a surgical site.

Amendment and Response

Applicant: Curtis Miller et al.

Serial No.: 10/008,415

Filing Date: November 13, 2001

Docket: 1554-AB

Title: GAS ASSISTED SPRAY APPLICATOR

3. (New) An applicator including a mixing tip and a manifold attached thereto for applying adhesive from attached syringes, the manifold including a plurality of syringes holders for receiving syringes and a plurality of corresponding lumens fluidly connected to the syringes and extending outward from the manifold in a manner such that the lumens expel fluids substantially adjacent to one another that mix thereafter, the mixing tip comprising a mixing body having a mixing chamber therein for selectively receiving the first and second solutions in a separated manner via the lumens, and the tip further being connectable to a compressed gas source and providing for release of compressed gas into the tip such that the compressed gas when released mixes and propels the solutions and the compressed gas to a surgical site.
4. (New) The applicator of claim 3 wherein the lumens extend from the syringes to an end of the manifold.
5. (New) The applicator of claim 3 wherein the lumens extend from the syringes to an end of the manifold and substantially outward therefrom.
6. (New) The applicator of claim 3 wherein the mixing tip is a shell defining a hollow chamber and the lumens from the manifold extend into the hollow chamber.
7. (New) The applicator of claim 3 wherein the mixing tip is a shell defining a hollow chamber and the lumens from the manifold extend through the hollow chamber.
8. (New) The applicator of claim 7 wherein the hollow chamber has gas outlets through which any fluid expelled from the lumens exits, whereby the lumens are smaller than the gas outlets such that compressed gas releases from around, adjacent to or proximate the expulsion ports.
9. (New) The applicator of claim 8 wherein the syringes of differing sizes.

Amendment and Response

Applicant: Curtis Miller et al.

Serial No.: 10/008,415

Filing Date: November 13, 2001

Docket: 1554-AB

Title: GAS ASSISTED SPRAY APPLICATOR

10. (New) The applicator of claim 8 wherein the syringes are of differing volumes.
11. (New) The applicator of claim 3 wherein the syringes of differing sizes.
12. (New) The applicator of claim 3 wherein the syringes are of differing volumes.
13. (New) The applicator of claim 1 wherein the lumens extend from the syringes to an end of the manifold.
14. (New) The applicator of claim 1 wherein the lumens extend from the syringes to an end of the manifold and substantially outward therefrom.
15. (New) The applicator of claim 1 wherein the mixing tip is a shell defining a hollow chamber and the lumens from the manifold extend into the hollow chamber.
16. (New) The applicator of claim 1 wherein the mixing tip is a shell defining a hollow chamber and the lumens from the manifold extend through the hollow chamber.
17. (New) The applicator of claim 16 wherein the hollow chamber has gas outlets through which any fluid expelled from the lumens exits, whereby the lumens are smaller than the gas outlets such that compressed gas releases from around, adjacent to or proximate the expulsion ports.
18. (New) The applicator of claim 17 wherein the syringes of differing sizes.
19. (New) The applicator of claim 17 wherein the syringes are of differing volumes.